

# Notice of Allowability

Application No.

10/764,570

Examiner

Alfred Basichas

Applicant(s)

SEHMBI, JASWINDER S.

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 1/27/04.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ The drawings filed on 23 June 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 6/23/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**ALFRED BASICHAS**  
**PRIMARY EXAMINER**

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

#### IN THE SPECIFICATION:

Page 1, line 30, the term "**the a heat xchanger**" has been changed to **--a heat exchanger--**.

Page 2, line 2, the term "**th**" has been changed to **--the--**.

Page 2, line 30, the term "**achiev s**" has been changed to **--achieves--**.

Page 2, line 31, the term "**deliv ring**" has been changed to **--delivering--**.

Page 4, line 28, the term "**nsure**" has been changed to **--ensure--**.

Page 4, line 28, the term "**fu l/air**" has been changed to **--fuel/air--**.

Page 5, line 18, the term "**described**" has been changed to **--described--**.

Page 5, line 30, the term "**Burn r**" has been changed to **--Burner--**.

Page 5, line 31, the term "**us d**" has been changed to **--used--**.

Page 6, line 2, the term "**ev n**" has been changed to **--even--**.

Page 6, line 31, the term "**ar a**" has been changed to **--area--**.

Page 7, line 30, the term "**b**" has been changed to **--be--**.

Page 7, line 31, the term "**ar**" has been changed to **--are--**.

Page 8, line 29, the term "**mixtur**" has been changed to **--mixture--**.

Page 8, line 30, the term "**d fined**" has been changed to **--defined--**.

Page 8, line 31, the term "**chamb r**" has been changed to **--chamber--**.

### **IN THE CLAIMS:**

Claim 1, 1<sup>st</sup> line, the term "**pr mixed**" has been changed to **--pre-mixed--**.

Claim 1, 5<sup>th</sup> line, the term "**a**" (*first occurrence*) has been changed to **--an--**.

Claim 1, 9<sup>th</sup> line, the term **--the--** has been inserted between the terms "**of**" and "**burner.**"

Claim 1, 14<sup>th</sup> line, the term **--the--** has been inserted between the terms "**of**" and "**burner.**"

Claim 6, 1<sup>st</sup> line, the term "**ar**" has been changed to **--are--**.

Claim 7, 5<sup>th</sup> line, the term "**it**" has been changed to **--the venturi tube--**.

Claim 7, 11<sup>th</sup> line, the term **--the--** has been inserted before the term "**burner.**"

Claim 12, 2<sup>nd</sup> line, the terms "**the**" (*both occurrences*) have been changed to **--a--**.

### **REASONS FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance:

Applicant claims, among other things, pre-mixed fuel burner assembly, including a hollow tubular burner body having a longitudinal

axis, the burner body having a longitudinal porting area having formed within a plurality of radially formed slots, the burner body having an open end and a closed end, a hollow tubular venturi tube positioned within the burner body along the longitudinal axis extending from the open end, a distribution plate having longitudinal mid-section and flanges, the flanges being coupled to the inside surface of burner body, the mid-section having a plurality of holes formed within, and the distribution plate being positioned within the burner body such that the holes of distribution plate are positioned adjacent to the radially formed slots within the burner body and extending from the open end to the closed end of the burner body.

Applicant further claims a method of making a fuel burner assembly, the method including the steps of forming a tubular burner body having an open end and a closed end, cutting a plurality of radial slots formed within the tubular body, forming a hollow tubular venturi tube and positioning the venturi tube within the burner body along the longitudinal axis extending from the open end partially into the burner body, forming a distribution plate with longitudinal mid-section and flanges, cutting a plurality of holes within the mid-section, and coupling the flanges of the distribution plate to the inside surface of the burner body such that the distribution plate is positioned between the inside surface of the burner body and the venturi tube and such that the holes within the mid-section are positioned adjacent the slots of the burner body.

***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Rodgers (5,743,727)**, **O'Donnell (6,371,753)**, **Ross (3,156,292)**, and **Riehl (4,118,175)** disclose burners reflecting the general background of the art. Nevertheless, the prior art of record, taken alone or in combination therewith, does not disclose nor make obvious the combination as claimed by applicant.

Ross discloses a premix burner similar to that described in the specification, but besides other deficiencies it lacks the claimed structure. Some of the most glaring differences include a distribution plate **10** positioned outside of the tubular burner body and structure, specifically the crimped portions **29,30,38,39**, that would preclude the method of manufacture recited in the claims. Riehl, while disclosing a true tubular burner that would be conducive to being formed from a hollow tube, is even more deficient in that it has no distribution member at all. Similarly O'Donnell, while reciting a tubular burner body that is capable of being formed from a tube and including tubular venturi tubes, lacks the critical distribution member. Rodgers is closest of the references cited by the examiner and recites a distribution member **30** with holes **38** fails to disclose substantial structure such as the flanges and the manner in which the distributor is connected to the tubular burner. Rodgers is further

deficient in the positioning of the holes that are remote, rather than adjacent, the slots of the tubular burner member.

Of all the references made of record, **Wood (6,461,152)** appears the closest. Cited by applicant and discussed in the specification, this reference fails to disclose or make obvious, alone or in combination with any other reference or knowledge of one of ordinary skill in the art, the claimed invention. Among other shortcomings, it should be noted that Wood fails to disclose holes in the mid-section. While it may be argued that the holes in the flanges are adjacent to the slots of the tubular burner member, they are clearly not as adjacent as they would be according to the claimed recitations. It should also be noted that the tubular member **22** welded to the distribution plate **16** would obstruct and preclude placement of holes in the mid-section as required by the claim. It is well established, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Nevertheless, the additional tubular member is central to

the invention disclosed by Wood and would preclude the combination as it teaches away from any placement of holes in the mid-section extending from the open end to the closed end of the burner body.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272 4871. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571 272 4877. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

Art Unit: 3749

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

August 5, 2005



Alfred Basichas  
Primary Examiner